



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/739,639	12/20/2000	Akio Goto	NEC-2130US	4751

30743 7590 05/29/2003

WHITHAM, CURTIS & CHRISTOFFERSON, P.C.  
11491 SUNSET HILLS ROAD  
SUITE 340  
RESTON, VA 20190

EXAMINER

WANG, GEORGE Y

ART UNIT PAPER NUMBER

2871

DATE MAILED: 05/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/739,639

Applicant(s)

GOTO, AKIO

Examiner

George Y. Wang

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement filed 29 October 2002 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuyuki et al. (J.P. Pub. No. 10054917, from hereinafter "Yasuyuki") in view of Miura et al. (U.S. Patent No. 6,170,996, from hereinafter "Miura").

4. As to claim 1-2 and 4, Yasuyuki discloses an optical waveguide module (fig. 1) in which transmitted signal light emitted from a laser light emitting element passes through

a first optical waveguide (fig. 1, ref. 14) and a second optical waveguide (fig. 1, ref. 17) to strike a transmitting/receiving medium such as an optical fiber (fig. 1, ref. 18), and where the signal light from transmitting/receiving medium passes through second optical waveguide and is received by light-receiving element (fig. 1, ref. PD).

However, Yasuyuki fails to specifically teach a first light-blocking resin covering over the monitoring light-emitting element and first optical waveguide and a second light-blocking resin covering part over the monitoring light receiving element and second optical waveguide.

Mitsuda discloses an optical waveguide module with an absorptive, light-blocking resin covering (fig. 1, ref. 24) over the coupling part between the monitoring light-receiving device (fig. 1, ref. 17) and the optical waveguide (fig. 1, ref. 26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an absorptive, first light-blocking resin covering over the monitoring light-emitting element and first optical waveguide and a second absorptive, light-blocking resin covering part over the monitoring light receiving element and second optical waveguide since one would be motivated to improve optical light isolation and reliability (col. 1, ref. 11-20). Resins are well known in the art for fixative and light-blocking properties. Optical loss occurs when light strays, but with light-blocking resin to cover the monitoring light-emitting and receiving elements coupling parts, one of ordinary skill in the art would recognize that optical isolation and noise reduction would significantly be improved. Furthermore, resin coverings provide a lost-

cost optical module that is easily manufactured and is easily connectable to external transmission lines (col. 1, lines 54-59).

5. As to claim 3, Yasuyuki and Miura disclose an optical waveguide module as recited above, however, references do not specifically disclose filling the coupling parts of the optical module with transparent resin.

Miura discloses an optical waveguide module with a transparent resin covering (fig. 1, ref. 18).

It would have also been obvious to one ordinary skill in the art at the time the invention was made to fill the coupled areas with transparent resin since one would be motivated by its high optical transmissivity. A transparent resin efficiently permits the transmission and reception of optical signals to and from the optical fibers (col. 5, lines 7-16).

6. Regarding claims 5-6, Yasuyuki and Miura disclose an optical waveguide module as recited above with a reflective, light-blocking plate (fig. 1, ref. 13), disposed above the first optical waveguide, which blocks transmitted signal light missing the light-emitting coupling part.

### **Conclusion**

Application/Control Number: 09/739,639  
Art Unit: 2871

Page 5

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Y. Wang whose telephone number is 703-305-7242. The examiner can normally be reached on M-F, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 703-305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

GW  
gw  
May 13, 2003

ROBERT H. KIM  
SUPERVISOR  
TECHNOLOGY CENTER 2000